

9. Notes on a Collection of Heterocera made by Mr. W. Feather in British East Africa, 1911-12. By Lt-Col. J. M. FAWCETT\*.

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(Plates I. & II.†)

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The literature on British East African Heterocera is not extensive, and a great part of it is contained in recent German publications mainly dealing with their adjoining territory, and to which I have not had access. But the district is remarkable mainly for specially developed forms. The most interesting collection under notice contains a large number of those—many of which appear to be still undescribed, and also a number of known forms which have not hitherto been recorded from British East Africa. The majority of the latter are known through allied forms from the West Coast districts, from which they present striking variations in colour; I have not been able to examine the genitalia.

Out of a total of 126 species which I have examined, 36 appear to be still undescribed, which seems a large proportion, considering that the country where the collection was made is now traversed by the Uganda Railway, which must offer special facilities to collectors, but this region has never yet been thoroughly worked out. I believe Mr. Feather has a large number of Heterocera still to be examined, and I hope to be able to give the result of my enquiries into them in a future paper. Professor Poulton, of the Hope Museum at Oxford, has the butterfly portion of the collection, and I understand that he has discovered several new species amongst the specimens.

Great credit is due to Mr. Feather for the exactness with which

\* Communicated by the SECRETARY.

† For explanation of the Plates see p. 113.

he has preserved the locality and date of every specimen, by which the time of flight of the various forms is recorded, and also for the excellent condition of the specimens.

My thanks are especially due to the Hon. Walter Rothschild, and to Sir George Hampson, whose kind assistance was of great value to me in working out the various species in the British Museum.

The following is a list of the localities given in this memoir :—

- |                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| (1) Kedai, British East Africa. | Altitude 2500 feet, 120 miles from the coast.    |
| (2) Kibweisi, ditto.            | Altitude 3000 feet, 114 miles up Uganda Railway. |
| (3) Voi, ditto.                 | Altitude 1800 feet, 101 miles up Uganda Railway. |
| (4) Masongaleni, ditto.         | Altitude 3000 feet, 182 miles up Uganda Railway. |

In describing the various new species, I have indicated in each case the form in the British Museum which I have found to be nearest to it, and stated the points of difference between them. The figures of new species are drawn to exact size by myself. From the fact that many of the species were taken in November and December and again in March and April, it would appear that they are at least double-brooded.

A few species are added to this paper which were taken by Lady Colville at Meru, B. E. Africa, but unfortunately I have not got the dates or elevation of the locality.

## HETEROCERA.

### SYNTOMIDÆ.

#### 1. METARCTIA NEÆRA, sp. n. (Pl. I. fig. 6.)

*Description*.—♂. Head, body, and wings unicolorous pale reddish brown, the hind wings almost diaphanous in the centre. A very indistinct fuscous spot at the apex of cell of fore wing.

*Habitat*. Kedai, 24th November. Expanse 40 mm.

This species is allied to *M. pulvereæ* Hampson, from Ruwenzori, from which it differs in having a blunter apex to the fore wing, and in lacking the black spot at the base of interspace 2, and the irroration of black atoms which covers the fore wing in *pulvereæ*.

#### 2. METARCTIA FLAVICINCTA Aurivillius.

*Habitat*. Meru, B. E. Africa. Taken by Lady Colville.

#### 3. METARCTIA LATERITIA Herr.-Schäff.

*Habitat*. Meru, B. E. Africa. Taken by Lady Colville.

#### 4. THYRETES NEGUS Oberthür.

*Habitat*. Kedai, 25th November.

Agrees with the description of *negus*, except that the white spot in cell of fore wing is quadrilateral and not triangular.

## ARCTIADÆ.

5. *DIACRISIA MACULOSA* Stoll, Form *MACULARIA* Walker.

*Habitat.* Mombasa, 21st March.

6. *DIACRISIA JACKSONI* Rothschild.

*Habitat.* Kedai, 25th November.

7. *DIACRISIA EPICASTE*, sp. n. (Pl. I. fig. 5.)

*Description.*—♂. Head and collar grey, the latter with a bright orange fringe, thorax pale yellow; patagia streaked with grey. Abdomen orange above, ochreous underneath, with a lateral row of small black spots. The five middle somites of the abdomen black dorsally, orange laterally.

Fore wing pale cream-yellow; the interspaces between the veins with grey streaks; an orange discoidal spot; cilia and inner margin orange: hind wing pale cream-colour, cilia orange.

This form differs from all other species of *Diacrisia* which I have seen in its deep black abdomen.

*Habitat.* Masongoleni, 18th and 20th April. Expanse 46 mm.

8. *AMSACTA EVADNE*, sp. n. (Pl. I. fig. 4.)

*Description.*—♂. Head, thorax, and wings white; costa of fore wing cream-coloured. Abdomen, 1st somite and ventral area white, remaining somites yellow; the five middle somites with black bands dorsally.

Fore wing with four small black spots in interspace 1: one below median nervure, one below middle of vein 2, and two above vein 1. A black spot at base of interspace 2, and one at apex of discoidal cell. Two parallel rows of minute black spots distally, and a row of marginal black spots between the veins. No black spots on costa.

Hind wing: a black spot at apex of cell, and another beyond it submarginally on vein 6. A V-shaped black spot at anal angle with two minute specks inside it.

This form is nearest to *Amsacta flavizonata* Hampson, from North Nigeria, which form has no black spots on the hind wing.

*Habitat.* Kedai, 17th November. Expanse 40 mm.

9. *TERACOTONA RHODOPHLEA* Walker.

*Habitat.* Kedai, 25th November.

10. *ARGINA CRIBRARIA* Clerck.

*Habitat.* Mombasa, 30th October.

11. *RHODOGASTRIA BUBO* Walker.

*Habitat.* Kedai, 21st January.

## NYCTEMERIDÆ.

12. *DEILEMERA LEUCONOE* Hopffer.

*Habitat.* Kibweisi, 10th February.

## AGARISTIDÆ.

13. *ÆGOCERA OBLIQUISIGNA* Hampson.

*Habitat.* Kedai, 5th January.

14. *PARÆGOCERA CONFLUENS* Weymer.

*Habitat.* Kedai, 9th June.

15. *XANTHOSPILOPTERYX THRUPPI* Butler.

*Habitat.* Kedai, 7th November.

16. *XANTHOSPILOPTERYX SUPERBA* Butler.

*Habitat.* Kedai, 27th November.

17. *TUERTA TRINENI* Felder.

*Habitat.* Masongaleni, 1st April and 25th June.

## NOCTUIDÆ.

18. *PARATUERTA MARSHALLI* Hampson.

*Habitat.* Kedai, 12th March.

19. *PARATUERTA FEATHERI*, sp. n. (Pl. I. fig. 7.)

*Description* — ♂. Head and thorax red-brown; abdomen yellow, with two black dorsal spots on 2nd and 3rd somites, and four fuscous dorsal bands on succeeding somites. Fore wing red-brown suffused with pink; a pale pinkish costal subapical fascia. Outer margin pale pinkish, with a red-brown tornal spot. A broad white silver band from the base of costa along vein 1, reaching two-thirds of the length of the inner margin of the wing, and then bent up towards the apex, and narrowing to a point between veins 4 and 5. This band is bordered above and outwardly by a dark sap-green band, which also bends up and reaches the costa before the apex. Below, the white band is bounded by a pale pinkish band which gradually merges into an indistinct green band along the inner margin.

Hind wing dull yellow with a red-brown anal spot, surrounded by a small patch of red-brown irrorations. Underside dull yellow. Apex and outer margin of fore wing pale fuscous and a fuscous spot below apex of cell.

*Habitat.* Kedai, 8th December. Expanse 46 mm.

20. *PARATUERTA ARGENTIFASCIA*, sp. n. (Pl. I. fig. 7a.)

*Description.* — ♂. Head, thorax, and fore wing red-brown thickly irrorated with black and grey atoms. Abdomen dull yellow with

a dorsal series of small elongate fuscous spots. A triangular olive-brown spot in cell of fore wing, and below it a broad silvery white band along the median nervure from near its base (where it starts from a point), extending both above and below it, to the base of vein 3, where the band joins another broad silvery band bent up to the costa before the apex. The outer margin of these two silvery bands is bounded by a narrow waved olive-brown band from costa to inner margin. A marginal series of black points between the veins bordered inwardly by spots of grey irroration.

Hind wing dull yellow, with a broad black submarginal band with a very irregular inner margin. Underside pale yellow with broad black submarginal bands; margin grey; a black spot in cell of fore wing and a black bar on discocellulars joined to submarginal band.

*Habitat.* Kedai, 24th November. Expanse 44 mm.

The above two forms are nearest to *P. marshalli* Hampson, which differs from them in the white band being broken up into spots where it bends upwards, and in having a black tooth on the band on its lower margin.

There seems to be some doubt as to the correct position of the genus *Paratuerta*. Sir G. Hampson places it at the end of the Noctuidæ Acronyctinæ while Dr. Karl Jordan, writing in Seitz, "Macrolepidoptera of the World," places what appears to be another species of the genus (viz. *leucographa*) in the Agaristidæ. I have followed the British Museum arrangement here.

## 21. OVIOS NEALCES, sp. n. (Pl. I. fig. 8.)

*Description.*—♂. Head, thorax, and fore wing pale grey-brown with a violaceous reflection. Abdomen and hind wing pale ochreous with a broad fuscous marginal band.

Fore wing with a submarginal row of red-brown spots between the veins, which merges into a submarginal band towards the costa near the apex. A short white band from costa to vein 4 where it surrounds the reniform stigma. An indistinct orbicular spot in cell. Costa suffused with greyish irroration. In the female the white band of the fore wing is broader and more diffused.

*Habitat.* Kedai, 25th November. Expanse 38 mm.

## 22. PASIPEDA ROSEIVENTRIS Gerstaecker.

*Habitat.* Kedai, 25th November.

Perhaps a local form of *P. sambesita* Walker.<sup>2</sup> Recorded previously from B. E. Africa by Butler (P. Z. S. 1898, p. 424).

## 23. SETOLA PULCHRA Bethune-Baker.

*Habitat.* Kedai, 28th November.

## 24. SETOCTENA PATRICOLA Hampson.

*Habitat.* Masongaleni, 9th June.

25. *CALLYNA MONOLEUCA* Walker.

*Habitat.* Masongaleni, 6th April. The African specimens of this species are indistinguishable from specimens in the British Museum from India, Ceylon, and N. Guinea, except for their rather lighter hind wing.

26. *ERICETA SOBRIA* Walker.

*Habitat.* Kedai, 8th December.

27. *MOCIS REPANDA* Fabricius.

*Habitat.* Msola, November.

28. *BAMRA MARMORIFERA* Walker.

*Habitat.* Masongaleni, 25th May.

29. *SPHINGOMORPHA CHLOREA* Cramer.

*Habitat.* Masongaleni, 28th May and 9th June. A common species here as elsewhere.

30. *ENMONODIA CAPENSIS* Herr.-Schäff.

*Habitat.* Kedai, 2nd December. One ♀ specimen. Perhaps better known as *Spirama capensis*.

31. *NYCTIPAO MACROPS* Linnæus.

*Habitat.* Kedai, 21st May, ♂ ; Masongaleni, 6th June, ♀.

32. *ANUA MEJANESI* Guén.

*Habitat.* Kedai, 14th January, ♂.

33. *ACHÆA LIENARDI* Boisduval.

*Habitat.* Masongaleni, 31st March and 7th April. At least four different forms of this variable species are represented in the collection.

34. *ACHÆA CATELLA* Guén.

*Habitat.* Kedai, 9th January.

35. *ACHÆA DASYBASIS* Hampson.

*Habitat.* Mombasa, 28th May.

36. *ACHÆA PRESTANS* Guén.

*Habitat.* Masongaleni, 7th June.

37. *ACHÆA ALGIRA* Linnæus, Form *PROPERANS* Walker.

*Habitat.* Kedai, 4th October. Masongaleni, 9th June. The form from Kedai is smaller and paler.

38. *PARALLELIA ANGULARIS* Boisduval.

*Habitat.* Meru, taken by Lady Colville.

39. *PARALLELIA PORTIA*, sp. n. (Pl. I. fig. 20.)

*Description*.—♂. Head and thorax dark red-brown, abdomen ochreous. Fore wing: the basal area dark red-brown defined outwardly by a fine blackish line which is very irregular, being angled outwardly on median nervure and inwardly on vein 1. A broad grey median band, and beyond it a dark red-brown band defined outwardly by a fine postmedial dark line angled outwardly at veins 1, 4, and 6, and inwardly in interspace 2. Beyond this line is a narrow waved ferruginous band from vein 6 to inner margin where it ends in a black spot. A red-brown subapical spot defined inwardly by a whitish line, and continued across the distal area as a dark submarginal line. Marginal area greyish. Hind wing pale fuscous, with a fine medial line defined outwardly by a pale ochreous band: submarginal area fuscous, cilia whitish. In some specimens the outer edge of the grey median band of fore wing is much diffused and the band consequently broader.

*Habitat*. Kedai, 22nd December; Voi, 2nd May. Expanse 40 mm.

This form is nearest to *P. angularis* Boisd.; but differs from it in the basal line being angled and not straight, in having a fulvous or ferruginous band behind the postmedial line, and in the hind wing being banded instead of plain fuscous.

40. *PARALLELIA RECTIFASCIA*, sp. n. (Pl. I. fig. 21.)

*Description*.—♂. Similar to *P. portia* described above but smaller and darker. It differs from *portia* in the line defining the red-brown basal area of the fore wing being straight and not angled. The grey median band is narrower and straight on both edges. The dark red-brown postmedial band is angled outwardly only on vein 1 and inwardly only on vein 2. Ferruginous band as in *portia*, but apical spot darker and not defined inwardly with a whitish line. Hind wing: outer distal area black, inner area paler; cilia white.

*Habitat*. Kedai, 9th March and 9th and 14th December. Expanse 38 mm.

41. *TRIGONODES HYPPASIA* Cramer.

*Habitat*. Masongaleni, 18th June; Kedai, 7th January.

42. *OPHIDERES MATERNA* Linnæus.

*Habitat*. Voi, 2nd May, ♂; Kedai, 3rd January, ♀.

43. *PLUSIA ORICHALCEA* Fabricius.

*Habitat*. Kedai, 5th January.

44. *CYLIGRAMMA LATONA* Cramer.

*Habitat*. Kedai, 8th January.

45. *CYLIGRAMMA LILACINA* Guérin.

*Habitat*. Masongaleni, 25th May.

## 46. RHANIDOPHORA ALBIGUTTA, sp. n. (Pl. I. fig. 12.)

*Description*.—♂. Head, thorax, and fore wing pale brown, or mouse-colour. Abdomen and hind wing dull yellow. Fore wing with three white circular spots, one in cell and two, one above the other, on discocellulars.

Differs from *R. cinctigutta* Walker in the white spots of the fore wing having no black rings.

*Habitat*. Kedai, December. Expanse 40 mm.

## 47. GRAMMODES GEOMETRICA Fabricius.

*Habitat*. Kedai, 25th November.

## 48. PRODENTIA LITTORALIS Boisduval.

*Habitat*. Masongaleni, 8th January and 9th June. Common, as elsewhere.

## LYMANTRIADÆ.

## 49. LÆLIA TESTACEA Walker.

*Habitat*. Masongaleni, 23rd June.

## 50. CAVIRIA FLAVIFRONS Hampson.

*Habitat*. Masongaleni, 31st May.

## 51. PTEREOA TELESILLA Druce.

*Habitat*. Kedai, 8th December.

## 52. PSALIS SECURIS Hübner.

*Habitat*. Masongaleni, 18th June.

## 53. AROA DISCALIS Walker.

*Habitat*. Kedai, 22nd February.

## 54. AROA LIBYRA Druce.

*Habitat*. Kedai, 28th December.

## 55. ACONOPHLEBIA TRIANGULIFERA Hampson.

*Habitat*. Kedai, 8th December.

Only the type specimen is in the British Museum.

## 56. LYMANTRIA MELETE, sp. n. (Pl. I. fig. 9.)

*Description*.—♀. Head and thorax pale fuscous, abdomen pale red with a dorsal row of black spots. Antennæ black. Fore wing fuscous brown with a medial white fascia from costa to inner margin, suffused with an irroration of fuscous atoms. In some specimens this irroration is so dense that the white fascia becomes very indistinct. A black point at apex of cell. An indistinct postmedial lunular grey band, beyond which the submarginal area is irrorated with grey. Hind wing pale fuscous.

*Habitat*. Kedai, 8th June; Masongaleni, 24th March. Expanse 46 mm.

This form is nearest to *L. gondona* Swinhoe, but it is a larger and darker insect with the hind wing fuscous, instead of pale yellow. The band in *gondona* is narrow, and lacks the black point on the discocellulars.

57. *LYMANTRIA MELIA*, sp. n. (Pl. I. fig. 10.)

*Description*.—♂. Head reddish, thorax and fore wing pale brown, abdomen and hind wing pale red. Antennæ black. Fore wing with a median white fascia from costa to middle of interspace 1. A white spot beyond it at base of interspace 3. Cilia and costa edged with pale red. Underside of wings pale red.

*Habitat*. Kedai, 24th November, 12th December, and 1st March. Expanse 46 mm.

This form is nearest to *L. albinacula* Wallengren, but differs in the white markings of the fore wing being much more restricted, and in having a red abdomen and hind wings instead of yellow as in that species.

58. *LYMANTRIA METELLA*, sp. n. (Pl. II. fig. 31.)

*Description*.—♀. Head and body red, antennæ black. Fore wing bright fulvous, with a median white band broken up into spots in the interspaces, and angled outwards in interspace 3. The spots are situated as follows:—a double spot below the costa, a double spot at apex of cell, and three round spots in interspaces 1, 2, and 3. Cilia fulvous. Hind wing pale pinkish red, darker at the base and near the inner margin.

Underside similarly coloured to upperside, but paler, and the white spots of the fore wing more indistinct. The scaling of the wings is very sparse, and they are almost diaphanous on the distal areas.

*Habitat*. Masongaleni, 26th December. Expanse 60 mm.

59. *LYMANTRIA MENECLIS*, sp. n. (Pl. II. fig. 28.)

*Description*.—♂. Head and tibiae red; thorax red-brown. Abdomen red. Fore wing grey-brown inclining to fulvous on the inner margin. A median curved blackish line from costa to vein 1, bordered outwardly by a broad white band, which is profusely irrorated by black atoms, and divided into two parts by the median nervure. These white spots are bordered outwardly by another blackish band which is broadest on the costa. A submarginal waved blackish band. Cilia chequered red and brown. Hind wing cream-colour, with red marginal line and cilia.

This form is nearest to *Lymantria albinaculata* Walker, but is smaller, and has a red abdomen instead of yellow.

*Habitat*. Kedai, 25th November and 12th December. Expanse 40 mm.

60. *LYMANTRIA ARETE*, sp. n. (Pl. I. fig. 19.)

*Description*.—♂. Head and thorax pale reddish brown. Abdomen pale red, with a dorsal row of elongate fuscous spots.

Wings testaceous with bands of fuscous and ferruginous irroration. A round black spot at base of cell, and a similar spot in cell followed by a curved black bar on discocellulars. Three indistinct pale lines, one antemedial, one medial on discocellulars angled inwardly below them, and one postmedial. Margin pale testaceous. Between the postmedial line and the margin and also between the medial and postmedial lines is a darker band formed by fuscous irroration. The veins and interspaces 2, 5 and 6 defined with ferruginous irroration. A marginal row of black points between the veins of both wings. Cilia reddish. Hind wing pale testaceous without markings, but rather darker towards the apex.

*Habitat.* Kedai, 15th December. Expanse 40 mm.

I was unable to find any species represented in the British Museum which is at all near to this species.

61. *LYMANTRIA MELISSA*, sp. n. (Pl. II. fig. 29.)

*Description.*—♂. Head and thorax orange, abdomen pinkish, antennæ black. Fore wing hair-brown, with a broad chrome-yellow marginal band. A quadrate spot occupying one-third of cell, and another of the same size on the middle of inner margin, both spots being pale pink. A narrow and indistinct fascia of the same colour running up from the inner margin parallel with the outer edge of the brown part of the wing. An elongate pink band along the basal part of the inner margin. Hind wing pink, with a broad chrome-yellow margin as in the fore wing. Under-side similar to upperside, but paler.

*Habitat.* Masongaleni, 15th May. Expanse 50 mm.

I have not been able to find anything near this species in the British Museum.

62. *DASYCHIRA OBLIQUILINEA*, sp. n. (Pl. I. fig. 18.)

*Description.*—♂. Head, antennæ, thorax, and abdomen pale fuscous brown. Fore wing fuscous brown, the outer margin and the costa greyish, irrorated with fuscous. Basal area of fore wing fuscous brown with some greyish irroration. A fine black oblique medial line from costa to vein 1, where it almost meets a black line along base of inner margin. Beyond this is a deep brown whorl coming to a point outwardly on vein 5, and situated in a dark fuscous area which occupies the space between the medial and postmedial lines. A black postmedial line curved outwardly before the apex and bent inwardly on veins 2 and 3, and finally outwardly on inner margin. Outer area greyish crossed by two irregularly waved submarginal lines. Cilia greyish fuscous.

Hind wing greyish fuscous with two lunulate black spots at anal angle, one at end of cell and one at apex.

*Habitat.* Kedai, 8th January. Expanse 50 mm.

This form is nearest to *Dasychira nubifera* Holland, from South Nigeria, of which one specimen is in the British Museum, and

which lacks the fine medial black line and is darker and of a greenish colour. *D. nubifera* also has a complete submarginal black band on the hind wing.

63. *DULICHIA FASCIATA PLANA*, subsp. n.

*Description*.—♂. Head, thorax, and abdomen pale dull yellow. Wings pale cream-colour with the following marks:—an indistinct black spot at middle of inner margin surrounded by some black marginal hairs. Three small indistinct spots of black irroration as follows: one on the discocellulars, one distally in interspaces 1 and 5.

*Habitat*. Masongaleni, 5th February. Expanse 46 mm.

This form is near to *Dulichia fasciata* Wallengren from Natal, but all the specimens are without the prominent black median band of that form. *D. fasciata* also occurs in the same place, but the specimens are smaller.

63 a. *DULICHIA FASCIATA* Wallengren.

*Habitat*. Masongaleni, 5th February.

SATURNIADÆ.

64. *NUDAURELIA BELINA* Westwood.

*Habitat*. Masongaleni, 9th December and 9th March; Kedai, 20th January.

There is a green form and a red form and an intermediate form of this species in this locality, but they occur in the same places and at the same times. Mr. Feather bred the red form from larvæ in January. The specimens I possess from Natal resemble the intermediate form, and are rather smaller.

65. *NUDAURELIA JACKSONI* Rothschild.

*Habitat*. Meru, taken by Lady Colvile.

66. *NUDAURELIA TYRRHÆA* Westwood.

*Habitat*. Meru, taken by Lady Colvile. Somewhat smaller than my specimens from Natal.

67. *NUDAURELIA NEREIS* Rothschild.

(Nov. Zool. 1898, p. 605.)

*Habitat*. Voi, 2nd May.

Some doubt exists as to this species. It is near to *N. menippe* Westwood, but is considerably smaller and lacks the antemedial white fascia of that species. Mr. Rothschild thinks the specimen might be referable to another small species, *N. sufferti* Weymer (Berlin. Ent. Zeit. 1896, p. 85, pl. 8. fig. 1).

68. *NUDAURELIA VAU*, sp. n. (Pl. II. fig. 30.)

*Description*.—♂. Head, body, and fore wing bright ferruginous, the latter profusely irrorated with black atoms between the veins, and pinkish on the costal margin. A white antemedial line

margined basally with black, and angled outwardly above vein 1, from subcostal nervure to inner margin. A round hyaline spot on discocellulars surrounded by an ocellus which is brown with a black and then a white ring round it. This ocellus is large, being of equal size to that on the hind wing. A submarginal white line defined outwardly by a black line from the costa before apex (where it curves outwardly towards the outer margin) to the inner margin.

Hind wing pink with an indistinct V-shaped whitish mark on the inner margin. A somewhat similar ocellus to that on the fore wing on the discocellulars, but the hyaline spot is smaller, and it has in addition a crimson ring between the black one and the outer white one. A submarginal white line defined outwardly by a black line as in the fore wing. The marginal area beyond this line is concolorous with the fore wing. Underside marked similarly, but pink. Antennæ highly pectinated and ferruginous.

*Habitat.* Masongaleni, 30th November. Expanse 116 mm.

This form is nearest to *Nudaurelia macrophthalma* Kirby, but differs in having a full-sized ocellus on the fore wing, and a prominent white V-shaped antemedial line which is obsolete in *macrophthalma*, the latter is recorded from Chari and Lake Tchad in West Africa. Owing to this peculiar character I have named this form "*vau*."

69. *NUDAURELIA ZADDACHII* De Witz.

*Habitat.* Lake Albert, 9th June.

70. *GYNANISA MAIA* Klug.

*Habitat.* Kedai, 25th November.

71. *GYNANISA WESTWOODI* Rothschild.

*Habitat.* Masongaleni, 14th November.

72. *ATTACUS ANTINORI* Oberthür.

*Habitat.* Meru, taken by Lady Colvile.

73. *EPIPHORA LUGARDI* Kirby.

(Ann. Mag. Nat. Hist. (6) xii. p. 165.)

*Habitat.* Masongaleni, 20th April, ♂ ; Kedai, 14th April, ♀.

Also taken at Meru by Lady Colvile.

Not in the British Museum Collection.

74. *ARGEMA BESANTI* Rebel.

(Verh. zool.-bot. Ges. Wien, 1895, p. 69.)

*Habitat.* Kedai, 25th November.

Mr. Feather writes of this very rare form, of which I understand only four specimens are known to have been taken, as follows:—"I took *besanti* on one of those abnormal nights when insects were flying about in millions. It had started raining about 2.30 in the afternoon, quite a gentle rain, which continued

until the afternoon of the following day. I stayed up till about 3 A.M., taking insects at light, and *besanti* was the last insect I took before turning in."

75. *SATURNIA BICULATA* Aurivillius.

*Habitat.* Kedai, 25th November.

76. *UROTA SINOPE* Westwood.

*Habitat.* Kedai, 25th November.

77. *USTA ANGULATA* Rothschild.

*Habitat.* Kedai, 27th November, ♀.

78. *PSEUDAPHELIA APOLLINARIS* Westwood.

*Habitat.* Kedai, 31st December, ♂.

79. *LUDIA CRENULATA*, sp. n. (Pl. II. fig. 27.)

*Description.*—♂. Head, thorax, and both wings brick-red. Antennæ bright fulvous. Abdomen greyish with five orange bands at the intersection of the somites. An elongate black spot on the discocellulars of the fore wing, and two other black spots above it, one in interspace 5, and one subcostally in interspace 6. Hind wing with nine yellow spots on the distal area—two in the middle of interspace 1, one at the base of interspaces 2 and 3; two near the apex of the cell, two in interspace 5 and one in interspace 6. Cilia yellow, and highly crenulated. Between vein 6 and the apex of the fore wing this crenulation gives the appearance of a portion of the wing having been cut out.

Underside of fore wing similar to upperside: hind wing with an antemedial and a postmedial grey crenulate line, between which the area is red-brown thickly irrorated with greyish atoms, which also extend to the margin. The yellow spots of the upperside are much more distinct on the underside.

*Habitat.* Kedai, 4th December, ♂. Expanse 60 mm.

This is a very remarkable form, and the nearest I could find to it in the British Museum is the figure of "*Heniocha grimmia*" Hübner, of which only Hübner's figure is known. But that figure shows a quite differently coloured insect.

80. *PARUSTA THELXINOË*, sp. n. (Pl. I. fig. 16.)

*Description.*—♂. Head dark fuscous, antennæ reddish ochreous, thorax ochreous; abdomen, 1st somite dark brown, remaining somites bright ochreous above, fuscous beneath. Wings pale fuscous with a reddish tinge. Fore wing with an antemedial whitish fascia curved basally at costa and inner margin. A small oval orange spot with white centre and ringed outwardly by a fine black line on discocellulars. A postmedial whitish lunulate fascia from inner margin near tornal angle to before apex, where it forks, and becomes two subapical white spots. The medial space between the two fasciæ darker.

Hind wing almost diaphanous in cell and inner margin, but covered with fine yellowish hair. A postmedial fascia, as in the fore wing, bordered internally by a darker band. An oval orange black-ringed spot on discocellulars similar to that on the fore wing.

*Habitat.* Kedai, 12th and 24th November. Expanse 70 mm.

This form is allied to *Parusta xanthops* Rothschild (Nov. Zool. vol. xv. 1908, p. 256, pl. ix. fig. 2), but differs in being larger and darker, and in the fore wing being much more acute. The figure referred to is that of a worn specimen, almost diaphanous, but the colour is described as cream-buff.

# 81. GOODIA ORIENS HEPTAPORA, subsp. n. (Pl. I. fig. 13.)

*Description.*—♂. Head and palpi dark chocolate-brown, collar greyish with a dark fringe; thorax pale brown. Fore wing ochreous with a pinkish tinge at base; a fine black antemedial line from costa to inner margin, bent in basally on median nervure, and outwards again on vein 1. A dark line on discocellulars, and a black postmedial lunular line beyond it, bent in on costa. Between these two lines there is a red-brown patch, and a darker one on the outer margin below the apex which is falcate. Hind wing pale ochreous with a pinkish tinge, unmarked, but rather darker towards the margins.

♀. Larger; pale ochreous and very sparsely scaled. The ante- and postmedial lines of the fore wing obsolete.

*Habitat.* Kedai, 9th and 25th November. Expanse, ♂ 46 mm., ♀ 50 mm.

This form is nearest to *Goodia oriens* Hampson, from Ruwenzori, but differs in coloration. In *oriens* the thorax is covered with black hairs, the distal area is blackish, especially towards the inner margin, and the cilia are black.

*Goodia hollandi* Butler (P. Z. S. 1898, pl. xxxii. fig. 1) is a much larger insect, is without the antemedial and discocellular black lines, and the postmedial line only reaches from costa to vein 5; while, on the other hand, it has a submarginal line on the hind wing, which is absent from this form.

## BRAHMÆIDÆ.

# 82. BRAHMÆA MACULATA Conte.

*Habitat.* Masongaleni, 11th November.

This species is not in the British Museum collection. The specimen was identified for me as *maculata* by Sir George Hampson.

## BOMBYCIDÆ CERATOCAMPIDÆ.

# 83. SABALIA EUTERPE, sp. n. (Pl. I. fig. 15.)

*Description.*—♂. Head black with two orange spots at base of the antennæ, which are black and bipectinated. Thorax covered

with long black hairs; patagia greyish. Abdomen black with five orange rings, and an orange spot at its extremity. Wings white, the veins fuscous. Fore wing: an antemedial fuscous fascia which fills nearly the whole cell; a black line on discocellulars; post-medial and submarginal fuscous fasciæ; a black marginal line; cilia fuscous. Hind wing white with only a submarginal fuscous fascia, angled towards the margin at vein 3.

*Habitat.* Kedai, 1st March and 25th November. Expanse 46 mm.

This form is nearest to *Sabalia sericea* Weymer (only a figure of which is in the British Museum), but differs as follows:—the cell is fuscous; the fuscous submarginal band is carried down to vein 2 in the fore wing, whereas it stops on vein 4 in *sericea*. In the hind wing the fuscous band is deeper, more sinuous, and nearer the margin, and the veins are black throughout.

#### 84. SABALIA THALIA, sp. n. (Pl. I. fig. 17.)

*Description.*—♂. Head black; orange spots at base of the antennæ, which are black and bipectinated. Collar broadly white with a black spot dorsally. Thorax covered with long black hair. Abdomen black with five orange rings, and an orange spot at its extremity. Fore wing pale brown, the veins white. A white antemedial fascia defined outwardly with dark brown, bent in basally on costa and inner margin. A brown spot on discocellulars. A white submarginal line from apex to tornal angle, defined inwardly by dark brown, beyond which the marginal area is brown, crossed by the white veins. Hind wing ochraceous at base; a dark spot on discocellulars, and a white submarginal band as on the fore wing.

Cilia of fore wing brown, of hind wing whitish.

*Habitat.* Kedai, 26th & 27th November and 12th & 14th April. Expanse 74 mm.

This form is nearest to *Sabalia picarina* Walker, which has a white hind wing and deep black marginal band.

The specimens of the above two species which I have seen are all males, and the species would appear to be at least double-brooded.

#### 84 a. ANAPHE PANDA Boisduval.

*Habitat.* Kedai, 12th March.

These specimens differ from *panda* from Natal in the fuscous border of the inner margin being curved up basally towards the thorax, and in having no distal band on hind wing, and in being smaller.

### SPHINGIDÆ.

#### 85. POLIANA MARMORATA, sp. n. (Pl. II. fig. 22.)

*Description.*—♂. Head, thorax, and palpi fuscous above; white spots above the eyes. Palpi beneath white, as also pectus and

lower surface of abdomen. Abdomen fuscous brown above with darker bands, and a short whitish lateral band on first three somites. Fore wing grey marbled with fuscous-brown bands and patches. Two white basal spots followed outwardly by a dark-brown basal band. Three antemedial fuscous lines angled outwardly on median nervure. A large medial brown patch extending from costa to below vein 2, in the middle of which is a white discocellular spot. Three waved postmedial blackish lines margined outwardly by white and an ochreous band. Submarginal and marginal lunular lines, the latter broken up into spots on veins 2, 3, and 4. Cilia chequered black and white on both wings. Hind wing fuscous, with a darker patch at anal angle, and some basal whitish hairs. Underside pale fuscous with indistinct darker bands, the hind wing white on the abdominal margin.

*Habitat.* Masongaleni, 23rd April. Expanse 74 mm.

This form is nearest to *Poliana buchholzi* Plötz, from West Africa, a figure of which is in the Dublin Museum.

86. *DOVANIA CIRCE*, sp. n. (Pl. I. fig. 1.)

*Description.*—♂. Head and antennæ ochreous; dark chocolate bands along sides of palpi; collar and thorax purplish brown, grizzled with grey, the patagia with white edges. Black bands along sides of thorax meeting on metathorax, which is bright ochreous. Abdomen pale ochreous with brown bands on each somite, these bands ending laterally in a row of dark brown spots. Legs black, banded with ochreous.

Fore wing greyish ochreous with a slight pinkish suffusion on disc. Three dark antemedial strigæ from costa to vein 1. A fourth medial striga from costa to median nervure. Between the 3rd and 4th strigæ an ochreous band reaching to vein 1, below which are three indistinct strigæ to inner margin. A black obliquely curved striga from costa at end of cell on which is placed a white reniform spot. A postmedial inwardly curved line edged outwardly with white, from costa to inner margin, and immediately beyond it an ochreous band outwardly defined by a band of brown spots between the veins, and darkest on the costa. From apex a short black striga curved inwardly. Cilia chequered brown and white.

Hind wing dark red, paling inwardly to bright ochreous. Anal angle paler with a grey suffusion, with three dark lines across it, the outer one of which is continued submarginally to the costa, beyond which the apical area is dark red-brown. Cilia as in fore wing.

*Habitat.* Kedai, 25th November. Expanse 90 mm.

This species is nearest to *Dovania pœcila* Rothschild.

87. *PRÆDORA MARSHALLI* Rothschild.

*Habitat.* Kedai, 8th December, ♂, and 20th April, ♂ & ♀.

88. *PSEUDOCLANIS POSTICA* Walker.

*Habitat.* Kedai, 20th December.

89. *POLYPTYCHUS FUMOSUS* PELOPS, subsp. n. (Pl. I. fig. 3.)

*Description.*—♂. Body and wings reddish brown with a pinkish suffusion; markings dark red-brown. Antennæ pale ochreous; sides of palpi, under part of body and legs dark brown. Head and thorax with a dark brown medial line. Abdomen, first two somites with dark brown bands. Fore wing with two black sub-basal spots at base of cell. Three antemedial oblique blackish lines from costa to inner margin, the 2nd and 3rd with a brown band between them. Reniform brown with dark edges. A double brown postmedial line from costa, running obliquely to inner margin, enclosing a darker space, and immediately beyond it an indistinct waved line. Subapical area dark red-brown as in *P. grayi*; a red-brown spot near anal angle.

Hind wing red-brown; the anal area paler with a dark striga on it ending in a black anal spot. Cilia dark brown, with white between the veins.

*Habitat.* Kedai, 14th & 22nd April. Expanse 70 mm.

This form is nearest to *Polyptychus fumosus* Rothschild, from Ruwenzori. Its colours are, however, much richer and darker than that species, as represented by Mr. Rothschild's figure, which shows a pale fuscous insect without a trace of pinkish or red-brown suffusion.

This form, being moreover from a different locality, must at least be a good local race of *fumosus*, even if not specifically distinct.

90. *CERIDIA MIRA* Rothschild.

*Habitat.* Kedai, 17th December, ♀; 29th December, ♂.

A remarkable form with highly pectinated antennæ of the form of a small Saturnid. Mr. Rothschild had not seen the female till he saw the specimen mentioned above. It only differs in its larger size and less highly pectinated antennæ.

91. *LOPHOSTETHUS DEMOLINI* Angas.

*Habitat.* Masongaleni, 11th November.

92. *CEPHONODES HYLAS* Linnæus, subsp. *VIRESCENS* Wallengren.

*Habitat.* Kedai, 4th January; Masongaleni, 12th September.

The writer has bred this species from six different forms of larvæ on Gardenia in Natal (Trans. Z. S. vol. xv. p. 312, April 1901).

93. *NEPHELE DIDYMA* Fabricius, Form *HESPERA* Fabricius.

*Habitat.* Kedai, 8th January.

94. *NEPHELE ACCENTIFERA* Beauvois.

*Habitat.* Msala, November.

95. *NEPHELE RECTANGULATA* Rothschild.

*Habitat.* Mombasa, 12th May.

96. *NEPHELE VAU* Walker.

*Habitat.* Meru, taken by Lady Colville.

97. *NEPHELE VESPERA*, sp. n. (Pl. II. fig. 26.)

*Description.*—♂. Head, body, and wings with dark brown bands and lines. Fore wing: a dark basal band followed by three antemedial waved lines; two medial waved lines bent in on the inner margin, and enclosing a pale round discocellular spot; two postmedial lines, the inner one nearly straight, and the outer crenulate from costa to inner margin, and between them and the antemedial lines a large dark-brown patch angled outwardly nearly to the margin below vein 4; three black submarginal spots before the apex, joining the latter by a fine black line. Hind wing with a broad brown marginal band. Underside paler, with markings more indistinct. Palpi white beneath, and a whitish line above the eyes.

*Habitat.* Kedai, 20th January. Expanse 80 mm.

This form is nearest to *Nephele funebris* Fabricius, from S. Africa, but differs from all species of *Nephele* that I have seen in having no black bands on the abdomen, which in this species is plain fuscous.

98. *TEMNORA ERATO*, sp. n. (Pl. I. fig. 2.)

*Description.*—♂. Head red-brown, dark grey vertically; thorax grey. Abdomen greyish with bright ochreous bands, and a dorsal row of black spots on the somites. Fore wing: basal third grey; disc pinkish, with two brown patches on the costa defined by whitish outwardly. Antemedial and postmedial lines, the latter crenulate below the costa, and becoming large brown lunules between the veins on the disc. A white line to apex with an ochreous patch beneath it. A black submarginal spot below apex; inner margin brown. Hind wing pale fuscous with an obsolete submarginal line, which only becomes distinct at anal angle. Two distal black spots on veins 3 and 4.

The female does not differ from the male except in the fore wings being longer and narrower and the discal area being paler.

*Habitat.* Masongaleni, 29th April, ♂; Kedai, 24th November, ♂ & ♀. Expanse, ♂ 50 mm., ♀ 60 mm.

This form is nearest to *Temnora natalis* Walker, but is much smaller.

99. *RHOPALOPSYCHE HIRUNDO* Gerst.

*Habitat.* Kedai, 8th January; Meru (Lady Colville).

100. *HIPPOTION DEXIPPUS*, sp. n. (Pl. II. fig. 25.)

*Description.*—♂. Head, thorax, and antennæ bluish grey, the fringes of the patagia white, and white spots above the eyes.

Abdomen paler grey. Fore wing grey, palest antemedially; a black spot at end of cell, and a fuscous-grey oblique band across the middle, broadest on the costa, and curving inwards gradually until it becomes linear on the inner margin. An indistinct submarginal line from apex to inner margin where it becomes blackish. Between this line and the medial band there are some small black spots above the inner margin. Hind wing pale ochreous with medial and submarginal dark-grey bands, between which the distal area is mottled with dark grey spots. Cilia white. Underside similar to the upperside, but paler.

*Habitat.* Kedai, 25th November. Expanse 72 mm.

This form is nearest to *Hippotion roseæ* Butler, from Delagoa Bay, but is much smaller, and has no pink antennæ as in that species.

101. *HIPPOTION DIYLLUS*, sp. n. (Pl. II. fig. 23.)

*Description.*—♂. Head, thorax, abdomen, antennæ, and fore wing very pale yellowish ochreous; hind wing rather darker towards the margin, with a pinkish tinge on the discal area. Cilia white, with minute dots at the end of the veins of the fore wing. Two subapical blackish dots on the costa of the fore wing, and a small orange spot below the cell, at the base of interspace 3. Underside similar but paler on the margins.

*Habitat.* Kedai, 25th November. Expanse 56 mm.

This form, though very different in colour, resembles somewhat in structure the common green *Basiothæa medea* Fabricius, but is a true *Hippotion*.

102. *HIPPOTION EXCLAMATIONIS*, sp. n. (Pl. II. fig. 24.)

*Description.*—♂. Head, body, and fore wing pale ochreous; hind wing greyish fuscous with pale submarginal and marginal ochreous bands. Fore wing with a small black spot at extremity of cell, and close to it a black elongate spot in interspace 4; the two spots being in the form of a note of exclamation. A submarginal row of small black spots on the veins of the fore wing.

*Habitat.* Masongaleni, 9th June. Expanse 70 mm.

This form is nearest to *Hippotion roseipennis* Butler (which also occurs in this district), but differs from it in being pale buff, instead of dull green with a reddish hind wing. It also lacks the postmedial line of *roseipennis*, and instead of a submarginal line from the apex of the fore wing has a line of black spots on the veins.

103. *HIPPOTION ROSEIPENNIS* Butler.

*Habitat.* Kedai, 16th January. A faded specimen.

104. *HIPPOTION ESON* Cramer.

*Habitat.* Meru, taken by Lady Colville.

105. *HIPPOTION CELERIO* Linnæus.

*Habitat.* Meru, taken by Lady Colville.

## NOTODONTIDÆ.

106. *STAUROPUS DASYCHIROIDES* Butler.

*Habitat.* Kedai, 25th November.

Only the type specimen of this species is at present in the British Museum, and Sir George Hampson expressed some doubt about its belonging to the genus *Stauropus*.

107. *PHALERA LEYDENBURGI* Distant.

*Habitat.* Kedai, 25th November; Masongaleni, 4th March.

## LASIOCAMPIDÆ.

108. *CHILENA CONTINUA* Aurivillius.

*Habitat.* Masongaleni, 25th May.

109. *CERATOPACHA GEMMATA* Distant.

*Habitat.* Kedai, 17th November, ♀; 25th November, ♂.

The female differs from the male in being larger, rather paler, and being without the black abdomen; but has the black brush of hairs on the costa of the hind wing underneath.

110. *CERATOPACHA DECORA*, sp. n. (Pl. II. fig. 32.)

*Description*.—♀. Head, legs, thorax, and antennæ pale cream-coloured. Abdomen yellow above, white beneath, thickly covered with hair; anal somite whitish.

Fore wing bright ochreous. An indistinct white curved basal line; a waved whitish antemedial line defined outwardly by dark ochreous, from costa to inner margin. A black spot at lower end of cell. A waved oblique postmedial whitish line, bent inwards on costa and defined inwardly by dark ochreous, from costa to inner margin. An irregular lunular submarginal white line, also bent inwardly on costa and defined inwardly by dark ochreous.

Hind wing paler ochreous basally, with a fuscous striga from costa to end of cell. A golden yellow distal band from costa to inner margin. Beyond this band the marginal area is white with an indistinct ochreous band from costa to vein 3. Cilia ochreous. Underside very pale ochreous; fore wing unmarked, hind wing with a faint indication of the yellow band of the upperside and having a black brush of hairs on the basal half of the costa.

*Habitat.* Kedai, 18th March. Expanse 60 mm.

Differs from *gemmata* in the whitish lines of the fore wing being waved, and not straight as in that species, and the hind wing has a prominent golden yellow band which is absent from *gemmata*.

111. *PACHYMETA FLAVIA*, sp. n. (Pl. I. fig. 14.)

*Description*.—♂. Head and thorax grey-brown with a purple tinge. Abdomen reddish ochreous; antennæ ochreous. Fore wing: base fulvous, median area purplish grey, crossed by triple antemedial and postmedial dark waved lines from costa to inner

margin. A dark brown renal stigma enclosing a fulvous reniform on discocellulars. Outer area fulvous brown subapically, crossed by a submarginal row of bright fulvous lunules. Cilia dark brown. Hind wing pale reddish brown, crossed by an indistinct darker submarginal fascia.

Female similarly coloured, but much larger, a good deal paler, and without purple suffusion.

*Habitat.* Kedai, 25th November, ♂; Masongaleni, 31st March, ♀. Expanse, ♂ 46 mm., ♀ 74 mm.

This form is nearest to *Pachymeta purpurascens* Aurivillius, from Mashonaland, but is paler and smaller. *P. purpurascens* is a much stouter larger species, is suffused throughout with purple, and has *no* discoidal reniform stigma.

#### 112. *PACHYMETA ROXANA*, sp. n. (Pl. II. fig. 33.)

*Description.*—♂. Head, thorax, fore wing, and abdomen pale reddish brown. Antennæ whitish.

Fore wing crossed by an oblique dark brown line from costa to inner margin, beyond which is a dark brown fascia. Distal area paler; a submarginal lunular dark brown band. Underside paler, with a dark chocolate submarginal band.

Hind wing pale fuscous inclined to ochreous basally; a distal dark brown band followed outwardly by a band of whitish lunules which are defined outwardly by dark brown, margin pale. Cilia fuscous.

Underside of hind wing dark chocolate-brown on the basal half, followed by bands as on the upperside. The inner area white from inner margin to vein 1. The costa angled to a point at centre.

*Habitat.* Kedai, 21st January. Expanse 50 mm.

The chief feature of this form is the underside of the hind wing; I have not been able to find any species near it in the British Museum collection.

#### 113. *GONOMETA POSTICA* Walker.

*Habitat.* Masongaleni, 11th November, ♀.

This form is a good deal larger and redder than specimens which I have bred in Natal (see Trans. Zool. Soc. vol. xv. p. 313, 1901), and the fore wing is shot with vivid purple. It is a pity that only a female was sent to me, as a specimen of the very different male would have been most interesting.

#### LIMACODIDÆ.

##### 114. *PARASA VIVIDA* Walker.

*Habitat.* Kedai, 26th November.

#### HYPSIDÆ.

##### 115. *EGYBOLIS VAILLANTINA* Stoll.

*Habitat.* Mombasa, 14th September.

116. *CALLIORATIS BELLATRIX* Dalman.*Habitat.* Teita Hills, 17th September.

## GEOMETRIDÆ.

117. *EUPAGIA TULLIA*, sp. n. (Pl. I. fig. 11.)

*Description.*—♂. Frons, palpi, and thorax bright red-brown (or chestnut), apex of head and shaft of antennæ white. Abdomen reddish ochreous. Fore wing with outer margin angled at vein 3; base ochreous, striated with reddish brown; an oblique brown antemedial line from costa to inner margin, and a similar post-medial line, angled below costa near apex, to inner margin; the area between these two lines bright red-brown; outer area pinkish striated with red-brown, and bearing a diffused fuscous spot near tornal angle. Hind wing ochreous striated with red-brown, with two dark medial bands from vein 6 to inner margin, angled outwardly at vein 3; outer margin angled at veins 3 and 6.

2nd Form. *VRIDESCENS*, nov.

This form is exactly similar to *tullia* in size, shape, and markings, but the medial band is dark sap-green, instead of bright red-brown, and defined outwardly by a whitish line, beyond which the outer submarginal area is paler green instead of pinkish.

*Habitat.* Kedai, 11th April (red form); 20th March (green form). Expanse 38 mm.

These forms are nearest to *Eupagia determinata* Walker, in which species the postmedial line of the fore wing is straight and not bent inwards below the costa.

118. *NOTHABRAXAS RUDICORNIS* Butler.*Habitat.* Kedai, 24th November.119. *PETRODAYA OLIVATA* Warrender.*Habitat.* Masongaleni, 30th April.120. *MACARIA UMBRATA* Warrender.*Habitat.* Kedai, 28th December.121. *BISTON MATURNARIA* Walker.*Habitat.* Kedai, 22nd November.122. *CUSIALA MACULATISSIMA* Grünb.*Habitat.* Kedai, 24th March.123. *PETOVIA DICHROARIA* Herr.-Schäff.*Habitat.* Kedai, 2nd November.

## COSSIDÆ.

124. *DUOMITUS KILIMANJARENSIS* Holland.*Habitat.* Kedai, 7th December.

## EXPLANATION OF THE PLATES.

## PLATE I.

Fig.

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2. *Temnora erato*, p. 108.
3. *Polyptychus fumosus pelops*, p. 107.
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Fig.

11. *Eupagia tullia*, p. 112.
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## PLATE II.

Fig.

22. *Poliana marmorata*, p. 105.
23. *Hippotion digyllus*, p. 109.
24. *Hippotion exclamationis*, p. 109.
25. *Hippotion dexippus*, p. 108.
26. *Nephele vespera*, p. 108.
27. *Ludia crenulata*, p. 103.

Fig.

28. *Lymantria menecles*, p. 99.
29. *Lymantria melissa*, p. 100.
30. *Nudaurelia vau*, p. 101.
31. *Lymantria metella*, p. 99.
32. *Ceratopacha decora*, p. 110.
33. *Pachymeta rozana*, p. 111.